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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,707	01/22/2004	Masashi Tokuda	2271/71523	7647

7590 09/28/2007  
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EXAMINER
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ZHU, RICHARD Z

ART UNIT	PAPER NUMBER
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2625

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09/28/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/763,707

Applicant(s)

TOKUDA, MASASHI

Examiner

Richard Z. Zhu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 02 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Acknowledgement***

1. Acknowledgement is made of applicant's amendment made on 8/2/2007. Applicant's submission filed has been entered and made of record. The examiner notes that the applicant amended the independent Claim 1 and entered a new claim 9.

### ***Response to Applicant's Arguments***

2. The relevant drawings had been amended to show the label "Prior Art". As such, the examiner hereby withdraws the drawing objections under 37 CFR 1.83.
3. Claims 1-3 had been amended, specifically, ISDN is defined as integrated services digital network in paragraph 2 of Claim 1 and the ambiguous term "vice a versa" is amended to commensurate with the scope of Claim 1. Therefore, the examiner hereby withdraws the objections made under 37 CFR 1.75 (a).
4. With respect to Claim 51, there is no Claim 51 within this application since only 9 claims are present. If the applicant is referring to Claim 5, it is previously and currently rejected as being unpatentable over *Averbuch*. With respect to newly added Claim 9, it appears said claim does not contain new matter. As such, Claim 9 should be entered and made of record.
5. The applicant's arguments had been duly considered and the arguments are persuasive, the ground of rejection set forth in the pervious office action should be withdrawn. However, in view of the amendment, a new ground of rejection is entered.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 6, and 9 are rejected under 35 USC 103 (a) as being unpatentable over the teachings of Applicant Admitted Prior Art (*AAPA*) in view of *Blackwell et al (US 5598401 A)*.

Regarding Claim 1, *AAPA* discloses:

an analog interface (**Fig 4, SW1 to NCU section of Fig 5, interface with PSTN**) formed from a silicon data access arrangement (**Fig 5, Page 4, lines 5-14, "silicon data access arrangement"**) operative to interface with an analog telephone line (**Fig 5, Telephone Line 309**), said analog interface including an insulation device (**Fig 5, Insulation Condenser 310**) configured to insulate a remainder of said facsimile use modem apparatus (**Fig 5, Secondary Side comprising Controller Section, Modem DSP Section and System Side Device**) from said analog telephone line

a digital interface (**Fig 4, ISDN Interface Section 203**) operative to interface with an ISDN or Integrated Services Digital Network line (**Fig. 4, ISDN Line 204**);

a signal converting device (**Fig 4, Codec 206 + Fig 5, Secondary Side 302. The analog interface of Fig 5 passes processed analog signal from PSTN to the codec in Fig 4 for further processing into signal use for ISDN**) configured to convert a modem signal

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used in facsimile communications via the analog telephone line into a signal used in the ISDN line (**Page 3, lines 11-20**) and convert a second signal from the ISDN line into a converted signal for use in facsimile communications via the analog telephone line (**Page 3, lines 21-28**).

a monitoring device (**Fig. 4, Codec 206 and Addition Amplifier 209**) configured to monitor a progress of the facsimile communications (**Page 3, lines 17-20**); said monitoring device being connected to the silicon data access arrangement (**Page 4, lines 2-4 and Page 4, line 22 – Page 5, line 7**).

a data transmitting device operative to transmit linear data to the speaker (**Fig 4, Speaker 207 and see Page 3, lines 15-20**).

However, *AAPA* does not disclose that the monitoring device is configured to monitor a progress of the facsimile communication via the ISDN line.

*Blackwell* discloses a monitoring device (**Fig 4, Terminal 100 and see Col 4 Row 62 – Col 5, Row 32, a computer that receives modulated information so that the user can use it to make inputs at User Interface 301, Col 7, Rows 11-29**) that is configured to monitor a progress of the facsimile communication via the ISDN line (**Col 6, Row 55 – Col 7, Row 29, the system of *Blackwell* resembles that of the device of *AAPA* in that it allows the communication between ISDN and PSTN lines and there exist a monitoring device in the form of a computer that allows the user to review received information**), said monitoring device being connected to a data access arrangement (**Fig 4, Analog Interface Circuit 314 and see Col 7, 1-2 that defined the analog interface circuit as a data access arrangement**).

*Blackwell* is in the same field of endeavor of allowing inter-communication between PSTN and ISDN lines as *AAPA*.

It would've been obvious to one ordinarily skilled in the art at the time of the invention, to modify the conventional facsimile apparatus of *AAPA* with the configuration set forth in Fig 4 of *Blackwell* so as to enable the device of *AAPA* to monitor a progress of facsimile communications via the ISDN line even with a data access arrangement present whereas the motivation would've been to provide for "a single integrated data communication device to be configured and also subsequently reconfigured to provide for data communications over a variety of networks including public switched telephone networks, leased line, and digital networks including T1, E1, and ISDN" (*Blackwell*, **Abstract**).

Regarding Claim 2, *APAA* teaches a facsimile use modem apparatus according to Claim 1, wherein said linear data is formed from facsimile sending data and facsimile reception data (**Page 3, lines 17-20**).

Regarding Claim 3, *APAA* teaches a facsimile use modem apparatus according to claim 2, further comprising a volume adjusting device configured to multiply each of the facsimile sending data and facsimile reception data by a prescribed gain when a volume of the speaker is adjusted (**Page 3, lines 17-19. It is well known to all that speaker volume is adjusted by changing the gain of an input amplifier, Official Notice**). The motivation and modification to combine the references are the same as recited in the rejection of Claim 1.

Regarding Claim 6, *APAA* discloses in Fig 5 a network control unit comprising a silicon data access arrangement and in Fig 4 a Speaker 207 and ISDN Interface Section 203.

Given what was taught by *Mardinian*, an integrated and compact monitoring system that can monitor a progress of G4 signal, because it is already in digital format, via the analog telephone line and a progress of G3 signal via the ISDN line, it would've been obvious to one ordinarily skilled in the art at the time of invention to make a NCU comprising a silicon data access arrangement, a speaker, and an ISDN Interface Section 203 in order to have a compact system that could minimize cost by utilizing a minimum amount of components and still meet the rigorous standards of digital communication.

**Regarding Claim 9, *AAPA* discloses wherein said signal converting device includes a DSP section (Fig 5, Modem DSP Section 304), and said DSP section converts a facsimile transmission signal or facsimile reception signal to generate the linear data supplied to the speaker (Page 4, line 22 – Page 5, line 7. The signal from PSTN line of Fig 5 is first processed by Modem DSP Section 304, it is then passed into the SW1 in Fig 4 where an addition amplifier 209 takes the processed signal and sends it to Speaker 207).**

8. Claims 4-5 and 7-8 are rejected under 35 USC 103 (a) as being unpatentable over the combined teachings of *APAA* in view of *Blackwell et al (US 5598401 A)* and *Averbuch et al. (US 5502752 A)*.

Regarding Claim 4, the combination of *APAA* and *Blackwell* teach the elements of Claim 1 from which the above claims are dependent upon. However, the combination does not teach the elements of Claim 4.

*Averbuch et al. (US 5502752 A)* teaches a PSTN/ISDN 100 (Fig. 1, PSTN/ISDN 100) coupled to a mobile network (Fig 1, MSC 105 and see Col 2, Rows 50-53), comprising a data canceling device (Fig 4, Data Buffer 400 and see Col 4, Rows 3-4) configured to

cancel excessive facsimile communications data when a clock of the ISDN line is faster than that of the modem (**Col 4, Rows 8-14 “an entire bit deleted” and see Fig. 8 step 812**).

Therefore, it would've been obvious to one ordinarily skilled in the art at the time of invention to adapt data buffer 400 to measure clock of ISDN line, as suggested by CLK1 of *Averbuch*, and to measure clock of modem, as suggested by CLK2 of *Averbuch*, in order to conform to the CCITT recommendation for V.110 framing, into the silicon data access arrangement based modem of *APAA* and *Blackwell* in order to provide “an apparatus that matches clock rates between independent networks” (*Averbuch*, Col 2, Rows 9-17).

Regarding Claim 5, *Averbuch et al. (US 5502752 A)* discloses that the apparatus further comprising a noise suppressing device (**Fig 4, Data Buffer 400 and see Col 4, Rows 3-4**) operative to suppress noises output by repeatedly using a previous data when the clock of the ISDN line is slower than that of the modem (**Col 4, Rows 14-24 “an entire bit is added...” and see Fig. 8 step 812**).

However, *Averbuch* does not teach a speaker.

The *AAPA* teaches the speaker (**Fig 4. Speaker 207**).

Regarding the facsimile with modem of Claim 7 dependent upon Claims 1-3 and 6, and Claim 7 dependent upon Claims 4 and 5, please refer to the rejection of Claim 1 on silicon data access arrangement based modem of the combined system of *APAA* and *Blackwell* as well as the rejection of Claim 4 on facsimile using modem apparatus that compensate for different clock rates whereas the motivation and modification to combine all references are the same as recited in the rejections of Claim 1 and Claim 4.



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Regarding the network connecting the facsimile having the modem of Claim 8 dependent upon Claims 1-3, and 6, and Claim 8 dependent upon Claims 4 and 5, please refer to the ISDN/PTSN network as disclosed by *APAA* and *Blackwell* in the rejection of Claim 1 and the rejection of Claim 4 on facsimile using modem apparatus that compensate for different clock rates whereas the motivation and modification to combine all five references are the same as recited in the rejections of Claim 1 and Claim 4.

### ***Conclusion***

9. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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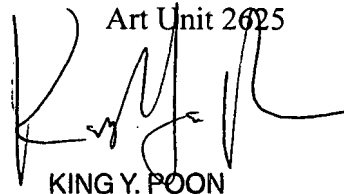
MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440 and Richard Z. Zhu whose telephone number is 571-270-1587. The examiners can normally be reached on M-F, 8:00 - 4:30.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RZ<sup>2</sup>  
09/25/2007

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SUPERVISORY PATENT EXAMINER